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| 09/674,101      | 10/26/2000  | Mikko Kanerva        | 875.0005USU         | 1599             |

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| EXAMINER |
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ELAHEE, MD S

| ART UNIT | PAPER NUMBER |
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2645

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/674,101

Applicant(s)

KANERVA ET AL.

Examiner

Md S Elahee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Response to Amendment***

1. This action is responsive to an amendment filed on 03/24/04. Claims 1-17 are pending.

***Response to Arguments***

2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 7, the phrase 'the subscriber' on page 2, line 13 lacks sufficient antecedent basis because it is unclear which subscriber the phrase is referring to.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partridge, III (U.S. Patent No. 5,473,671) and in view of Alperovich et al. (International Pub. No. WO 98/05153).

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Regarding claim 1, Partridge teaches storing in the call treatment table (i.e., system subscriber information) including service definitions of a subscriber (fig.1; col.2, lines 49-61).

Partridge further teaches establishing connections to the subscriber via a network element having access to the call treatment (i.e., subscriber information) of the subscriber (fig.1; col.2, lines 49-67, col.3, lines 1-5, 14-26).

However, Partridge further fails to teach “allowing a subscriber to define in his subscriber information that his incoming calls are to be forwarded to another subscriber”. Alperovich teaches allowing a subscriber to define in his subscriber information that his incoming calls are to be forwarded to another subscriber (page 7, lines 19-21). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow a subscriber to define in his subscriber information that his incoming calls are to be forwarded to another subscriber as taught by Alperovich. The motivation for the modification is to have the caller subscription in order to forward the call at different location of the subscriber.

Partridge further teaches indicating the forwarding of a call and a caller's identity in a call establishment signaling (fig.1; col.2, lines 49-67, col.3, lines 1-5, 14-26).

Partridge further teaches allowing the subscriber to define an acceptance list of callers' number (i.e., set of caller identities) in the subscriber information for defining allowed callers' number (i.e., caller identities), the allowed callers' number being either those included in or excluded from the group (fig.1; col.1, lines 65-67, col.2, lines 49-67, col.3, lines 1-5, 14-26).

Partridge teaches determining whether the caller identity of an incoming forwarded call belongs to the accepted (i.e., allowed) callers' number (i.e., identities) by comparing the caller's

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number with the group of list of callers' number, in response to receiving the call establishment signaling in the network element (fig.1; col.1, lines 65-67, col.3, lines 14-26).

Partridge teaches continuing to establish the incoming forwarded call if the caller's number (i.e., caller identity) belongs to the allowed identities (fig.1; col.1, lines 65-67, col.3, lines 36-42).

Partridge teaches blocking the call (i.e., rejecting the incoming forwarded call) if the caller's number (i.e., caller identity) does not belong to the allowed identities (fig.1; col.2, lines 49-67, col.3, lines 1-5, 27-33).

Regarding claim 2, Partridge teaches that the subscriber defines the set of caller identities (fig.1; col.1, lines 65-67, col.2, lines 49-67, col.3, lines 1-5, 14-26).

Regarding claim 3, Partridge fails to teach "using a call forwarding counter in the call establishment signaling, in response to receiving call establishment signaling requesting establishment of a call from a calling subscriber to a first subscriber and determining that the first subscriber has forwarded the first subscriber's calls to a second subscriber, the call is forwarded to the second subscriber, and the value of the call forwarding counter is incremented". Alperovich teaches using a redirection counter in the call establishment signaling, in response to receiving call establishment signaling requesting establishment of a call from a calling subscriber to a first subscriber and determining that the first subscriber has forwarded the first subscriber's calls to a second subscriber, the call is forwarded to the second subscriber, and the value of the redirection counter is incremented (page 5, lines 31-35page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow using a

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call forwarding counter in the call establishment signaling, in response to receiving call establishment signaling requesting establishment of a call from a calling subscriber to a first subscriber and determining that the first subscriber has forwarded the first subscriber's calls to a second subscriber, the call is forwarded to the second subscriber, and the value of the call forwarding counter is incremented as taught by Alperovich. The motivation for the modification is to have the caller subscription in order to provide the use of a counter indicating the update of the call forwarding feature.

Partridge further fails to teach "determining whether the call has been forwarded, the value of the call forwarding counter indicated in the call establishment signaling is compared to predefined value, and if the value of the call forwarding counter exceeds the predefined value, the call is determined to be a forwarded one". Alperovich teaches determining whether the call has been forwarded, the value of the redirection counter indicated in the call establishment signaling is compared to predefined value, and if the value of the call forwarding counter exceeds the predefined value, the call is determined to be a forwarded one (page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow determining whether the call has been forwarded, the value of the call forwarding counter indicated in the call establishment signaling is compared to predefined value, and if the value of the call forwarding counter exceeds the predefined value, the call is determined to be a forwarded one as taught by Alperovich. The motivation for the modification is to have the caller subscription in order to provide the status of the call forwarding feature.

Regarding claim 4, Partridge teaches that callers, whose calls are to be rejected, are defined by the set of caller identities (fig.1; col.2, lines 49-61).

Regarding claim 5, Partridge teaches that the set of caller identities by callers whose calls are to be accepted, and rejecting calls whose caller identity does not belong to the set (fig.1; col.1, lines 65-67, col.2, lines 49-67, col.3, lines 1-5).

Regarding claim 7, Partridge teaches that an intelligent network capable of storing subscriber information, characterized in that in the network element, the event of receiving a forwarded incoming call to a subscriber having determined the subscriber's forwarded incoming calls to be rejected is defined to be a trigger for sending a query to the intelligent network, and in response to having received the request to establish a call to a subscriber and having determined that the call has been forwarded and the subscriber has determined the forwarded incoming calls to be rejected, a query having the calling party's number as a parameter is sent to the intelligent network (fig.1; col.1, lines 65-67, col.2, lines 49-67, col.3, lines 1-5, 14-26).

Partridge teaches that in the intelligent network, a set of allowed calling numbers in the subscriber information is stored and in response to having received the query sent by the network element, the set of allowed calling numbers is retrieved from the subscriber information, the calling party number is compared to the set, and the network element is instructed to continue a call establishment procedure if the calling party number belongs to the set of allowed calling numbers and to reject the incoming call if the calling number does not belong to the set (fig.1; col.1, lines 65-67, col.2, lines 49-67, col.3, lines 1-5, 14-26).

Regarding claim 8, Partridge further teaches that a fixed network comprising a switch 50 (i.e., local exchange) the subscriber is connected to, characterized in that the network element is

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a switch and the subscriber information is stored in a database the switch is connected to (fig. 1, 2; col.2, lines 45-61).

Regarding claim 9, Partridge teaches that a switch serving the subscriber, and a database connected to the switch (fig. 1; col.2, lines 45-61).

Partridge teaches that the subscriber information is stored in the database and the network element is the cellular carrier (i.e., mobile services switching center) (fig. 1; col.2, lines 45-61).

However, Partridge fails to teach “a visitor location register”. Alperovich teaches a visitor location register (fig. 2, element 210). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow a visitor location register as taught by Alperovich. The motivation for the modification is to have doing so in order to forward the call at different location of the mobile station.

Regarding claim 10 is rejected for the same reasons as discussed above with respect to claims 1. Furthermore, Partridge fails to teach “a gateway mobile services switching center via which an incoming calls of the subscriber are routed”. Alperovich teaches a gateway mobile services switching center via which an incoming calls of the subscriber are routed (fig. 2; page 6, lines 33-37, page 7, lines 1, 2). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow a gateway mobile services switching center via which an incoming calls of the subscriber are routed as taught by Alperovich. The motivation for the modification is to have doing so in order to route the call for the Public Land Mobile Network.

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Partridge further fails to teach "the network element is the gateway mobile services switching center". Alperovich teaches that the network element is the gateway mobile services switching center (fig.2; page 6, lines 33-37). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to the network element being the gateway mobile services switching center as taught by Alperovich. The motivation for the modification is to have doing so in order to reroute the received IAM signal to the serving MSC/VLR.

Regarding claim 11, Partridge teaches determining whether a call has been forwarded, the presence of a forwarding number indicating the identity of the party having forwarded is studied, and if the forwarding number is present, the call is determined to be forwarded (fig.1; col.2, lines 49-67, col.3, lines 1-5, 14-26).

Regarding claims 12 and 15 are rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Partridge teaches switch 50 and cellular carrier 30 (i.e., exchanges) (fig.1).

Regarding claims 13 and 16, Partridge further to teach verifying the forwarding of a call using a call forwarding counter. Alperovich teaches verifying the forwarding of a call using a redirection counter (page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge to allow verifying the forwarding of a call using a call forwarding counter as taught by Alperovich. The motivation for the modification is to have the caller subscription in order to provide the status of the call forwarding feature.

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Regarding claim 14, Partridge teaches configuring the subscriber information stored in the storing means (abstract; col.2, lines 29-40, col.6, lines 1-12).

Regarding claim 17 is rejected for the same reasons as discussed above with respect to claims 10 and 12.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Partridge, III (U.S. Patent No. 5,473,671) and in view of Alperovich et al. (International Pub. No. WO 98/05153) and further in view of Lynch (U.S. Patent No. 6,487,600).

Regarding claim 6, Partridge in view of Alperovich fails to teach "accepting calls from an unknown caller number". Lynch teaches accepting calls from an unknown caller number (col.29, lines 3-12). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Partridge in view of Alperovich to allow accepting calls from an unknown caller number as taught by Lynch. The motivation for the modification is to accept the unknown caller in order to receive a link request from a user.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shaffer et al. (U.S. Patent No. 6,240,170) teach Method and apparatus for automatic language mode selection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alam Elahee whose telephone number is (703) 305-4822. The examiner can normally be reached on Mon to Fri from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

M. E.

MD SHAFIUL ALAM ELAHEE  
May 29, 2004

Allan Hoosain  
ALLAN HOOSAIN  
PRIMARY EXAMINER  
for Tsang